

**To:** CN=Erin Foresman/OU=R9/O=USEPA/C=US@EPA[]  
**Cc:** CN=Carolyn Yale/OU=R9/O=USEPA/C=US@EPA;CN=Tom Hagler/OU=R9/O=USEPA/C=US@EPA[]; N=Tom Hagler/OU=R9/O=USEPA/C=US@EPA[]  
**From:** CN=Laura Fujii/OU=R9/O=USEPA/C=US  
**Sent:** Thur 3/4/2010 5:36:03 PM  
**Subject:** Re: BDCP March 10 Meeting on Purpose and Need - Laura Fujii OK for call today 3-4, can go to Mtg 3/10  
<http://per2.nwp.usace.army.mil/survey.html>  
<http://www.spk.usace.army.mil/organizations/cespk-co/regulatory/index.html>  
(embedded image)  
(embedded image)

Hi Erin,

I am available for a call today from 3-4 pm, just send me the call-in number (I have staff meeting up to 3pm, so make it about 3:10pm). If at all possible, Tom, at a minimum, should be on the call, since he has been the lead voice so far on the Purpose and Need discussion.

I can go on March 10 to the meeting. Tom - Is it possible to carpool with you? If not, I will try to take the train in to Sacramento.

#### Bay-Delta water yield

Regarding a scientifically based value for the Bay-Delta watershed water yield, there may not be an overall value available since we are talking about the Sacramento River watershed and San Joaquin River watershed which pretty much encompass the entire Central Valley drainage system. There may be scientifically supportable yield values for subbasins. Below is information, which may be dated, that I have collected over the years from EIS reviews.

Information I have collected over the years from EIS reviews:

- 1) ave ann flow into Bay-Delta 27.8maf = 42 % of all CA surface water. Sac basin = 75 % of freshwater flows into bay. Delta supplies about 23 million Californians (2006).
- 2) Sacramento River 77% freshwater flows, SJR 15%, eastside streams the rest. (2007 Yuba Accord)
- 3) 10% Delta inflow for local use, 30% for export, 20% for salinity control, 40% for outflow in excess of min identified requirements. (2007 Yuba Accord)

The CVP yield estimates include (from EIS reviews):

- 1.) CVP yield as calculated for CVPIA (b)(2) purposes is 5,990,000 af.
- 2.) CVP has 20 reservoirs w/ combined storage capacity of 11maf;
- 3) CVP Delta export service area - total contractual obligations and delivery losses = 3.45 maf/yr.

The SWP yield estimates include (from EIS reviews):

- 1) Contracts for State Water call for 4.23 million acre feet (maf) of delivery, but average delivery from 1991-2002 was 1.86 maf. (2004)
- 2) SWP 29 contractors divert from Delta for total of 4,133 taf/yr. (4.133 maf). MWD largest SWP contractor w/ 2 maf. San Joaquin Valley ag SWP entitlement of 1.2 maf (SDIP EIS)

#### Needs Assessments

The Bureau of Reclamation CVP Needs Assessment model is quite detailed and includes specific information regarding evapotranspiration rates for various types of crops, and irrigation loss estimates, etc. (e.g., from canals, evaporation, spillage, etc.).

I believe, the demonstrated existing and forecasted need that far exceeds the available water supply is not a result of model manipulation. It is more as result of asking the farmers to base their water request

on what they want to farm and do, with the assumption of no limits on the availability of water. Thus, the question of what can or should be irrigated given a limited water supply is not asked (i.e., what crops, where, and how much land). Nor does it integrate how to maximize the use/productivity of a given unit of water via recycling, reuse, higher efficiency, water transfers, conservation, etc. This approach has led to irrigated agriculture on marginal/inappropriate soil (high selenium, high salt, easily water logged soils due to shallow clay layer) and irrigation of water-thirsty crops such as cotton and alfalfa in the desert.

Laura Fujii  
Region 9 US Environmental Protection Agency  
Environmental Review Office, CED-2  
Communities and Ecosystems Division  
75 Hawthorne St., San Francisco, CA. USA 94105  
phone: 415-972-3852  
fax: 415-947-8026  
fujii.laura@epa.gov

From: Erin Foresman/R9/USEPA/US  
To: Laura Fujii/R9/USEPA/US@EPA  
Cc: Carolyn Yale/R9/USEPA/US@EPA, Tom Hagler/R9/USEPA/US@EPA  
Date: 03/04/2010 08:21 AM  
Subject: Re: BDCP March 10 Meeting on Purpose and Need - comments from Laura Fujii on Agenda & Purpose & Need, added note

Hi Laura,

I believe the Corps is in agreement with your comments below. I hope we have a chance to talk about this today. Does reliable forecast data for water yield exist? Does DWR have these data? Do they not wish to use them and instead stick to "the need for BDCP is to fulfill CVP/SWP water contracts and provide Delta habitat restoration". If so, what tools do we have in NEPA to require them to provide more information regarding need. In my experience with transportation projects, transportation agencies have to provide data showing anticipated increased demand/need for additional transportation facilities. Unfortunately, we always run into a problem with models. Unless you wrote it, usually you don't understand it and cannot know if it has unrealistic assumptions or other tweaks that turn out results in support of a proposed project -- even if the need really isn't there. Is that an issue here?

It seems it would be best to go into this meeting with a solid concept of what is necessary for the NEPA document need statement and have a good idea of whether or not DWR is capable of producing it. Maybe DWR does not want to produce that information for the need statement, but if they have it or the capability to produce it then I think it is our responsibility to have it disclosed in the EIS.

Thanks again for this information!  
Erin

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Erin Foresman  
US EPA Region 9  
1325 J Street, 14th floor

C/O Army Corps of Engineers  
Sacramento, CA 95814-2922  
(916) 557 5253

-----Laura Fujii/R9/USEPA/US wrote: -----

To: Erin Foresman/R9/USEPA/US@EPA  
From: Laura Fujii/R9/USEPA/US  
Date: 03/04/2010 08:01AM  
cc: Carolyn Yale/R9/USEPA/US@EPA, Karen Schwinn/R9/USEPA/US@EPA, Kathleen Goforth/R9/USEPA/US@EPA, Tom Hagler/R9/USEPA/US@EPA  
Subject: Re: BDCP March 10 Meeting on Purpose and Need - comments from Laura Fujii on Agenda & Purpose & Need, added note

Hi Erin,

Just a note to add to the comments below:

The Central Valley Project Improvement Act (CVPIA) and ESA also have a role in encouraging and setting instream flow criteria and requirements. These tools are limited because the CVPIA focuses on the Delta (thus, upstream effects may not be captured), and ESA sets ecosystem requirements on a species-by-species basis versus what is needed by the entire river basin ecosystem and all other taxa.

I also recommend we continue to press for the CVP/SWP contract quantities to be more aligned with existing or reasonably foreseeable, reliable developed water supplies.

In an idealistic scenario, the BDCP discussion would start with scientifically valid data of the reliable yield of water available during different water years within the Bay-Delta watershed, and allocate this water to the various beneficial uses, including an ecosystem support allocation for fish, aquatic taxa, riparian, and floodplain habitats. Or alternatively set a cap on diversions at the point where science indicates there is a higher risk of harm to sustainability of the ecosystem, i.e., create a conceptual sustainability boundary for water diversions. (Ideas from -- Rivers for Life: Managing Water for People and Nature, Sandra Postel and Brian Richter, Island Press, 2003.)

Laura Fujii  
Region 9 US Environmental Protection Agency  
Environmental Review Office, CED-2  
Communities and Ecosystems Division  
75 Hawthorne St., San Francisco, CA. USA 94105  
phone: 415-972-3852  
fax: 415-947-8026  
fujii.laura@epa.gov

Laura Fujii---03/03/2010 06:08:36 PM---Hi Erin, Thanks for forwarding the proposed BDCP March 10 Purpose and Need Meeting agenda. Yes, it w

From:  
Laura Fujii/R9/USEPA/US

To:  
Erin Foresman/R9/USEPA/US@EPA

Cc:

Carolyn Yale/R9/USEPA/US@EPA, Karen Schwinn/R9/USEPA/US@EPA, Tom Hagler/R9/USEPA/US@EPA, Kathleen Goforth/R9/USEPA/US@EPA

Date:

03/03/2010 06:08 PM

Subject:

Re: BDCP March 10 Meeting on Purpose and Need - comments from Laura Fujii on Agenda & Purpose & Need.

Hi Erin,

Thanks for forwarding the proposed BDCP March 10 Purpose and Need Meeting agenda. Yes, it would be a very good idea to meet and discuss our BDCP strategy and key principles we wish to promote. I think it would be a good idea for at least Tom Hagler to attend, if possible, since the goal of the meeting is to have an 5 agency consensus on the 404 & NEPA Purpose and Need statement. I am available to attend, if needed.

Below are my comments in response to your initial thoughts on what the Need Statement should include. These comments are from the perspective of water supply reliability and Bay Delta restoration goals (versus a 404 perspective).

1.) Historically EPA has expressed concern with the CVP water supply allocation method based upon sector, M&I, and Agricultural needs since this allocation methodology does not explicitly consider the long-term reliability of the existing developed water supply; nor does it explicitly consider an ecosystem support allocation for instream and ecosystem beneficial uses (e.g., ecosystem services). Current CVP contract quantities are not based upon the actual quantity of long-term, sustainable, developed water. Therefore, current CVP contract allocations significantly exceed the quantity of water that is normally available. Actual deliveries are routinely well-below the designated contract quantity.

(Carolyn, Karen, Tom - It is my understanding that we and the State indirectly strive for an allocation of instream water for ecosystem services through our efforts to ensure compliance with water quality criteria, beneficial uses, and habitat goals (e.g. X2, flow requirements). Correct? or does California now have an explicit instream minimum flow requirement?)

2. The Needs Assessments required for long-term CVP contracts have always demonstrated an existing and forecasted need that far exceeds the available supply. Note: existing supply include diversion rates which leave many rivers dry or very dry (e.g., San Joaquin River).

3. The BDCP has co-equal goals of providing a sustainable water supply and successful ecosystem restoration. These co-equal goals should drive the NEPA and 404 Purpose and Need statement which is the basis for subsequent discussions on alternatives, proposed actions, effects analysis, etc. Erin & Tom - Why would there be different 404 and NEPA Purpose and Need statements? Shouldn't the 404 purpose and need be integrated as part of the NEPA Purpose and Need (I am assuming the 404 goal is LEDPA)?

4. River restoration has evolved with a better understanding of the flow prescriptions required to maintain or restore the ecological health of a river basin. I recommend we continue to press for a basin-wide approach, and one that explicitly allocates water for ecosystems services and a return to a more natural flow regime (see reference information below).

From Rivers for Life: Managing Water for People and Nature, Sandra Postel and Brian Richter, Island Press, 2003, pps. 53 -54. Eight general principles for managing river flows:

1. A modified flow regime should mimic the natural one, so that the natural timing of different kinds of flows

is preserved.

2. A river's natural perenniality or nonperenniality should be retained
3. Most water should be harvested from a river during wet months, little should be taken during the dry months.
4. The seasonal pattern of higher baseflows in wet seasons should be retained
5. Floods should be present during the natural wet season
6. The duration of floods could be shortened, but within limits
7. It is better to retain certain floods at full magnitude and to eliminate others entirely than to preserve all or most floods at diminished levels.
8. The first flood (or one of the first) of the wet season should be fully retained.

I am available for a meeting or call tomorrow morning or after 3pm, all day Friday, or Tue after noon.

Laura Fujii  
Region 9 US Environmental Protection Agency  
Environmental Review Office, CED-2  
Communities and Ecosystems Division  
75 Hawthorne St., San Francisco, CA. USA 94105  
phone: 415-972-3852  
fax: 415-947-8026  
fujii.laura@epa.gov

Erin Foresman---03/03/2010 01:25:49 PM---Hi All, There is a BDCP, five federal agency, meeting on 3/10/10 on purpose and need. Laura, please

From:  
Erin Foresman/R9/USEPA/US

To:  
Laura Fujii/R9/USEPA/US@EPA

Cc:  
Carolyn Yale/R9/USEPA/US@EPA, Karen Schwinn/R9/USEPA/US@EPA, Tom Hagler/R9/USEPA/US@EPA

Date:  
03/03/2010 01:25 PM

Subject:  
BDCP Agenda for March 10 Meeting on Purpose and Need

Hi All,  
There is a BDCP, five federal agency, meeting on 3/10/10 on purpose and need. Laura, please read the attached and let me know if you think you should be a part of this meeting. NEPA point of view regarding the need statement is important.

There is concern from Watersheds Office/Water Division and the Corps that BOR will use a need statement that reads something like "fulfill BOR/DOI water contracts." I understand that the Watersheds Office and the Corps do not consider this an appropriate need statement under NEPA. The need statment should describe true need for

water supply (potentially broken down by sector, municipal, industrial, agricultural) including a list of all contract holders along with an estimate of water needed (volume of water), list of suppliers, and approximate amount of water from providers for every contract holder. Water need information for each contract holder should be based on forecasted water use (potentially per sector) and provide information documenting past years actual water usage including any sales to other municipalities or water transfer agreements.

Please let me know what you think -- potentially we should all discuss this before next weeks meeting.

Thanks,

Erin

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Erin Foresman  
US EPA Region 9  
1325 J Street, 14th floor  
C/O Army Corps of Engineers  
Sacramento, CA 95814-2922  
(916) 557 5253

-----Forwarded by Erin Foresman/R9/USEPA/US on 03/03/2010 01:11PM -----

To: Erin Foresman/R9/USEPA/US@EPA, Tom Hagler/R9/USEPA/US@EPA, <Mary\_Grim@fws.gov>, <Barbara\_Beggs@fws.gov>, "Idlof, Patricia S" <PIdlof@usbr.gov>, "Victorine, Becky " <rvictorine@mp.usbr.gov>, "Tucker, Michael" <michael.tucker@noaa.gov>, "Redler, Yvette" <Yvette.Redler@noaa.gov>, "Jewell, Michael S SPK" <Michael.S.Jewell@usace.army.mil>, "Clay, Lisa H SPK" <Lisa.H.Clay@usace.army.mil>, "Monroe, Jim " <james.monroe@sol.doi.gov>, "Allen, Kaylee" <kaylee.allen@sol.doi.gov>

From: "Nepstad, Michael G SPK" <Michael.G.Nepstad@usace.army.mil>

Date: 03/03/2010 12:36PM

Subject: Agenda for March 10 Meeting on Purpose and Need

Attached. Lets all come well prepared.

Michael G. Nepstad

Deputy Chief, Regulatory Division

US Army Corps of Engineers, Sacramento District

1325 J Street, Room 1480

Sacramento, California 95814

(916) 557-7262 Fax:(916) 557-6877

michael.g.nepstad@usace.army.mil

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<<Agenda for the Federal Agency BDCP Purpose and Need Meeting.doc>>

[attachment "Agenda for the Federal Agency BDCP Purpose and Need Meeting.doc" deleted by Laura Fujii/R9/USEPA/US]